

Flight Simulation Training Device Qualification Guidance

ISSUE RESOLUTION PROCESS

FSTD Guidance Bulletin 05-04

- 1. **BACKGROUND**. The Flight Simulator Training Device (FSTD) qualification process has long been outlined in various advisory circulars that will soon be covered under Code of Federal Regulations (CFR) Part 60. Due to the complex and dynamic nature of simulation technology, it is difficult to quantify every issue that may arise in the qualification of an FSTD. Advances in technology have frequently led to questions being posed to the National Simulator Program (NSP) on issues that are not directly covered in the regulatory publications and advisory circulars. In an effort to maintain consistency between FSTD sponsors and manufacturers, the NSP provides the following guidance for submitting FSTD qualification issues.
- 2. <u>SIGNIFICANT ISSUES</u>. The following items will be considered significant issues on major projects, requiring the development of issue papers:
 - a. <u>Pre-Type Certification Basis</u> request to evaluate a simulator prior to type certification of the aircraft.
 - b. <u>Determination of Compliance</u> provides a statement of the FAA procedural requirements, including those that define the applicant's responsibilities for showing compliance.
 - c. <u>Areas of New Technology</u> or novel design that do not require a Special Condition but may require the development of an acceptable means of compliance with existing regulations which would set a national precedent.
 - d. <u>All other issues</u> that become controversial or may otherwise require National Simulator Program Manager action to resolve.

3. Submission Process.

- a. Issues may be proposed to the National Simulator Program at any time.
- b. Routine items relative to showing compliance and work relationships would not normally be raised as significant issues unless some special problems are anticipated or developed during the course of an FSTD qualification. Routine items will be handled with the sponsor by NSP personnel, with decisions and actions documented in correspondence, data submittals, and file records of meetings, conversations, and events. In this regard, it should be recognized that what may be routine with an experienced sponsor may need to be treated as a significant issue with a sponsor or manufacturer who has limited or no current FAA FSTD development and/or evaluation experience.
- c. As a minimum, the applicant must submit the "Statement of Issue" to the National Simulator Program Manager or the Simulator Evaluation Team (SET) Chairman for new aircraft not yet holding an FAA Type Certificate. Some "Discussion" and even a tentative "Conclusion" may be provided to further clarify the issue. However, the major emphasis of each issue paper should be to raise the issue to the attention of FAA and applicant management as early as



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practical, providing a concise "Statement of Issue" in language that is clearly understood by all parties concerned with resolution.

- d. Statement of Issues are primarily intended to provide FAA and applicant management with an overview of significant issues, to provide a means of determining the status of these issues, and to provide a post-simulator evaluation summary statement on how significant issues were resolved for general reference on future projects that might encounter similar situations. A Statement of Issue outline is contained in Appendix 1.
- 4. Upon completion the NSP will provide the applicant with a final determination. The final determine will include:
 - Statement of the issue.
 - b. Discussion.
 - c. FAA Position.
 - d. Applicant's Position.
 - e. Conclusion



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APPENDIX 1 – STATEMENT OF ISSUE FORMAT

a. Identify applicant, Point of Contact

Example: Simulator Training, Inc. John D. Ace, Director of Flight Simulation

b. List relevant regulation(s),

Examples: FAR Part 60.xxxx

c. List FAA policy documents relevant to the issue, such as Advisory Circulars, FSTD Qualification Guidance Bulletins, or policy letters.

Examples: Advisory Circular 120-40B

If there are no known established FAA policy statements on the issue, state "None."

d. Identify the issue by a short, concise, descriptive subject title,

Example: The applicant has requested approval of a Head Up Display (HUD) installation. The FAA has no published approval criteria for HUD.

- e. Provide a summary discussion of the issue. This is may be broken down to:
 - 1. Background information.
 - 2. Applicant's Position Statement, providing comments on the issue, opinions, arguments, etc.
 - 3. Applicant's recommendations.